Various Testing Requirements

Pavement Design

Asphalt mix design shall be forwarded to MCDOT for approval prior to placing any asphalt courses.

Forward test results to MCDOT along with paving plans.

Compaction Tests

1. Pavement Subgrade – 1 test per 800 l.f. with at least 1 test per street.
2. Curb Subgrade – 1 test per 500 l.f. with at least 1 test per street, per side.
3. Base Material – 1 test per 800 l.f. with at least 1 test per street, per side.
4. Sidewalk Subgrade – 1 test per 500 l.f. with at least 1 test per street, per side.

Maximum densities of the material compacted shall be determined in accordance with AASHTO T-99, Method A. Additional tests may be required if pavement design method is other than standard.

Materials

A. Base Material – Mat'l shall meet MAG Section 702.2. If "Select" material is used, the upper 4 inches must be aggregate base. Total thickness determined by lab tests, with the minimum thickness per the Roadway Design Manual.

B. Asphalt Concrete – Mat'l. shall meet MAG Section 710.

C. Preservative Seal Coat – Mat'l. shall meet MAG Section 713.

D. Concrete – Mat'l. shall be of the class specified in MAG Std. Details and shall conform to MAG Section 725, unless otherwise directed by the County Engineer.

E. Reinforced Concrete Pipe – Shall meet MAG Section 735. Rubber gaskets required under existing or proposed roadways. Minimum reinforced concrete pipe class III.

F. Corrugated Metal Pipe – Shall meet MAG Section 621. Bituminous coated or Aluminized required under existing or proposed roadways.

Utilities

A. Excavation – Shall conform to MAG Section 601. Attention is called to the necessary notification of all utilities.

B. Backfill Materials – Shall conform to MAG Section 601.4.3.

C. Compaction - 1. Trench under existing or proposed pavement, curb or gutter, paved alley, or when any part of the trench excavation is 2' or less from edge of pvmt or back of curb, backfill shall consist of ABC or select mat'l. Compaction shall conform to MAG Section 601. Water may be added to raise moisture to optimum ONLY.

2.Trench in an unpaved road where the distance from the edge of traveled way to any part of the trench is 2' or less, backfill shall consist of ABC or select material. Mat'l from 12" above pipe to 2' below finished grade shall be mechanically compacted to 95%. The upper 2' shall be mechanically compacted to 95%. Water may be added to raise moisture to optimum ONLY.

3. Trench where edge is more than 2' from edge of pvmt, back of curb, or edge of traveled way on an unpaved road, the mat'l. from 12" above the

pipe to finished grade shall consist sound earth mat'l., compacted to not less than 85%. Water setting is permissible.

4. Trenches in unpaved alleys or other unimproved traveled ways, backfill and compaction per paragraph C.3 above shall be followed.

5. Trenches in utility easements, backfill shall consist of sound material. Water setting is permissible.

6. Water setting shall be performed in lifts not exceeding 8'. The backfill leveled, the trench saturated and the mat'l. jetted to:

(a) Within 1' of the pipe if the lift is 8' or less form the top of pipe, or

(b) At least 1' into the previous lift if multiple lifts are necessary.

Sufficient water must be used, with at least 30 p.s.i. of pressure. Intervals of jetting shall not exceed 5'.

7. Water setting is permitted in new subdivisions. No paving is permitted over water settled trenches until compaction tests have been approved by the County Engineer.

D. Frequency - Tests shall be made at the locations & depths specified by the County Engineer or his representative. A min. of 1 set of tests required for each 4' of trench depth for trenches within 2' of pavement or back of curb. Otherwise 1 set of tests for each 6' of trench depth. The min. number of passing tests per set anticipated for spec. compliance is estimated as follows:

Pavement cut crossing – 1 set per crossing.

(a) Longitudinal pvmt cuts or trench edge within 2' as previously stated – 1 set per 300', with 1 min. per block

(b) All other locations – 1 set per 400', with 1 min. per block.

Tests may be taken at 4' vertical intervals in the same vertical plane at the inspector's option. The County Engineer may order load tests performed to determine the stability and adequacy of backfill before paving. Test is performed with approx. 18,000 lb. axle load vehicle. Excessive movement or settlement shall be cause for rejection. If rejected, retest shall be at the owners or contractors expense.